## ABSTRACT OF THE DISCLOSURE

Rewriteable electronic fuses include latches and/or logic gates coupled to one or more nonvolatile memory elements. The nonvolatile memory elements are configured to be programmed to memory values capable of causing associated electronic circuits to settle to predetermined states as power-up or reset signals are applied to the fuses. Although not required, the nonvolatile memory elements used in the rewriteable electronic fuses may comprise floating-gate transistors. An amount of charge stored on the floating gate of a given floating-gate transistor determines the memory value and, consequently, the state to which a fuse settles upon power-up or reset of the fuse.